

## CHAPTER 120. EVALUATE A FEDERAL AVIATION REGULATIONS PART 137 CONGESTED AREA OPERATIONS PLAN

### SECTION 1. BACKGROUND

#### 1. PTRS ACTIVITY CODE: 1332

**3. OBJECTIVE.** The objective of this task is to determine that a Federal Aviation Regulations (FAR) Part 137 operator can conduct agricultural dispensing operations safely over a congested area according to an approved plan. Successful completion of this task results in either approval or disapproval of an operator's proposed plan.

**5. GENERAL.** Agricultural aircraft may operate over congested areas if prior written approval is obtained from the appropriate official or governing body of the political subdivision over which the aircraft is to be operated.

*A. Appropriate Officials.* An appropriate official or governing body can include any of the following:

- (1) Mayor
- (2) City Manager
- (3) City Council
- (4) County Board of Supervisors
- (5) City Commissioner
- (6) Any other similar official

*B. Public Notice.* The public notice required by FAR § 137.51(b)(2) should be given at least 48 hours before dispensing operations begin. The form that the public notice takes is up to the operator. Newspaper ads, radio announcements, television announcements, or door-to-door handbills are all acceptable methods.

*C. Contents of Congested Area Plan.* Consider the following when reviewing the plan of operation required by FAR § 137.51(b)(3) and submitted by the operator.

(1) The plan must include an aerial photograph, large scale map, or diagram of the area to be worked. Whichever depiction is used, it should be appropriately marked to show all obstructions which could normally be expected to present a hazard during the operation and the areas which could be used for an

emergency landing and dumping of agricultural materials.

(2) The photograph, map, or diagram must be current, preferably within the preceding 24 months, to be considered representative of the area. If current photographs or diagrams are not available, realtor's maps may be used to supplement. The important aspect is not to accept crudely drawn maps that do not show actual scale distances.

*D. Assisting Operators.* Occasionally agricultural aircraft operators may request Federal Aviation Administration (FAA) assistance in determining whether an area is congested or not. Before the FAA can determine this, the site will have to be visually checked. The FAA cannot, of course, check every area an operator wants to service, but in some cases an operator needs legitimate assistance. The inspector must use judgement in determining the status of an area as congested or not. If the inspector has any doubt, he or she should consult with other inspectors or regional counsel for any precedent.

**7. SINGLE-ENGINE AIRCRAFT.** When congested area operations are conducted using single-engine aircraft, the inspector shall require the operator to arrange with appropriate officials of the area concerned to take such measures as are necessary to conduct the operation safely. These may include blocking off streets and other areas which could be used for an emergency landing or similar precautionary measures required in the interest of public safety. Before approving any operator's plan of operation, the inspector shall determine that the requirements contained in FAR § 137.51(b)(4)(iii) can be complied with.

#### **9. MULTIENGINE AIRCRAFT.**

*A. Takeoff Performance.* Before approving the conduct of operations over a congested area using multiengine airplanes, the operator must prove that the airplane to be used can be operated in accordance with the performance requirements in FAR § 137.51(b)(5)(ii). Such evidence will also be required to determine compliance with FAR

137.51(b)(5)(i), if it is necessary to take off over a congested area during dispensing operations. If the aircraft cannot meet the requirements of FAR § 137.51(b)(5)(i), the operator must state in the written plan of operation that no takeoff will be made over a congested area during dispensing operations.

*B. Critical Engine Inoperative.* Before approving the conduct of multiengine airplane operations over a congested area, the inspector shall require the operator to present conclusive documentary evidence that the airplane to be used can be operated in accordance with the performance requirements specified in FAR§ 137.51(b)(5)(ii).

**11. RESTRICTED CATEGORY AIRCRAFT.** FAR Part 21, or the operating limitations established for the airplane, may not require a flight manual for restricted category aircraft. Therefore, performance information may be found in the applicable military technical order, operating limitations, placards, and flight test performance data established by the airplane manufacturer, or any combination thereof. In addition, performance information provided by a designated engineering representative is satisfactory. If such performance information has not previously been established for the airplane to be used or, if any doubt exists concerning the authenticity of the information presented by the operator, a Manufacturing Inspection District Office should be contacted to arrange for an engineering flight test to obtain the required performance data.

**13. LOAD JETTISONING.** Should a question arise concerning the load jettisoning capability of the aircraft used in congested area operations, the operator

should be required to present jettisoning test data which show that the aircraft is equipped with a device capable of jettisoning at least one-half the aircraft's maximum authorized load of agricultural materials within 45 seconds.

*A. Data Not Determined.* If such data have not been determined for the aircraft or, if any doubt exists concerning meeting this requirement, the inspector should have the operator conduct an in-flight load jettisoning demonstration.

*B. Test Conditions.* The aircraft must be loaded with any suitable material, e.g., lime, sand, water, etc., and the demonstration shall be observed by the inspector from the ground. The discharge of material from the aircraft should be timed to determine compliance with the 45-second jettisoning requirement.

*C. Rotorcraft.* Jettisoning does not apply to helicopters (FAR § 137.53 (c)(2)).

*D. Preventing Inadvertent Jettisoning.* FAR § 137.53(c)(2) requires that aircraft conducting agricultural operations over congested areas must have a means of preventing inadvertent jettisoning of the load from the tank or hopper. This can be accomplished with a device such as:

- (1) Spring-loaded cover over a pull lever.
- (2) "T" handle or pull ring in a spring loaded shield.
- (3) A push-pull device fastened with fine safety wire.
- (4) Other equivalent devices.

## SECTION 2. PROCEDURES

### 1. PREREQUISITES AND COORDINATION REQUIREMENTS.

*A. Prerequisites.* This task requires knowledge of the regulatory requirements of Federal Aviation Regulations (FAR) Part 137 and Federal Aviation Administration (FAA) policies and qualification as an aviation safety inspector (ASI) (operations).

*B. Coordination.* This task may require coordination with the airworthiness unit, the regional counsel, and state, county, or local authorities.

### 3. REFERENCES, FORMS, AND JOB AIDS.

#### *A. References.*

- FAR Parts 1, 61, and 91
- Advisory Circular 137-1, Agricultural Aircraft Operations

#### *B. Forms.*

- FAA Form 1360-33, Record of Conference, Visit, or Telephone Call
- FAA Form 8000-36, Program Tracking and Reporting Subsystem Data Sheet

#### *C. Job Aids.*

- None

**5. PROCEDURES.** After a FAR Part 137 operator requests district office approval for a congested area operation, determine the need for congested area plan based on location, type of operation, etc. (FAR § 137.51(b))

*A. Plan Not Required.* If a plan is not required, record discussion on FAA Form 1360-33 and place it in the district office operator file. Do not open a Program Tracking and Reporting Subsystem (PTRS) file for this task.

*B. Plan Required.* If a plan is required, explain requirements of FAR § 137.51 and 137.53.

(1) Instruct the operator to present the plan to the district office for review.

(2) Remind the applicant of the requirement to coordinate with the appropriate state, local, or municipal authorities (FAR § 137.51).

(3) Discuss with the applicant various methods of public notification, such as newspapers, radio, and handbills.

*C. PTRS.* Open PTRS file.

*D. Plan Requirements.* Upon receipt of the operator's plan, ensure that the operator has included the following information:

(1) A current aerial photograph, current map, or a recently drawn diagram of the area to be worked.

(a) Any representation must show all obstructions which may present hazards during operation.

(b) Potential areas for emergency landing or dumping of agricultural materials must also be indicated.

(2) Altitudes to be maintained, approaches, departures, and turnaround considerations during operation.

(3) Name and type of material to be dispensed.

(4) Type of crop or plant.

(5) Dates and hours of dispensing operations.

(6) Coordination with air traffic control.

(7) Special operating procedures or limitations to ensure safe operations near schools, parks, freeways, etc.

(8) Method of public notification.

(9) An indication of coordination with the appropriate state, local, or municipal authorities (figure 120-1).

(10) Methods for complying with FAR §§ 137.51(b)(4) and (5) and 137.53(c)(2).

(a) Arrangements for blocking off streets and other areas which may be used for emergency landings.

(b) Observe the load jettisoning demonstration (if applicable) from the ground. For multiengine aircraft, refer to FAR § 137.51 (b)(5).

(11) Means for terminating the operation in the event of an emergency or at the inspector's discretion.

*E. Pilot Qualifications.* The plan must indicate the qualifications (FAR Part 61 and FAR § 137.53) of the pilot to be used in the operation.

*F. Aircraft Requirements.* The plan must include information that indicates the aircraft meets the requirements of FAR Part 91 and FAR §§ 137.31, 137.33, 137.51, and 137.53.

*G. Plan Approved.* When the plan meets all FAR requirements, all safety considerations, and appropriate coordination requirements, approve the plan in writing (figure 120-2). Each page of the plan is stamped “FAA approved,” dated, and signed by the principal operations inspector.

(1) Forward a copy of the approved plan to the operator.

(2) Place a copy of the plan in the district office file on the operator.

*H. Plan Not Approved.* If the plan cannot be approved, issue a letter disapproving the congested area plan (figure 120-3).

*I. PTRS.* Make appropriate PTRS work entry.

**7. TASK OUTCOMES.** Completion of this task results in either:

A. An approved congested area plan.

B. Issuance of a letter of disapproving the congested area plan.

## **9. FUTURE ACTIVITIES.**

A. Schedule monitoring of congested area plan if the task is in work program plans.

B. Monitor congested area plan. (See volume 2, chapter 121, Monitor a FAR Part 137 Congested Area Operation.)

C. Possible enforcement investigation if the operation is not conducted according to the approved plan or is in any other manner unsatisfactory. Use the approved plan as information for a subsequent enforcement investigation.

D. Review of any subsequent congested area operations.

**FIGURE 120-1**  
**SAMPLE LETTERS INDICATING COORDINATION WITH APPROPRIATE AUTHORITIES**

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**(To Agricultural Aircraft Operator)**

*[operator's name and address]*

I, *[name]*, the *[title of individual and name of town]* grant permission to *[name of operator]* to fly over the town of *[ name of town]* for the purpose of dispensing economic poisons from an agricultural aircraft on *[date of operation]*.

*[official's signature]*

**(To Federal Aviation Administration)**

*[name and address of district office]*

*[Name of operator]* will conduct the dispensing operation, described on the attached diagram, per FAR § 137.51. The aircraft used will be a *[make and model of aircraft and N-number]*.

The dispensing operation will be conducted at no less than *[altitude]* feet above ground level. The airspeed will be *[ speed in knots or mph]*.

*[Chemical name]* will be dispensed at the rate of *[number of gallons]* per acre.

The operation will be conducted from *[beginning date]* to *[ending date]*.

The public will be notified of the operation *[indicate methods of notification]* on *[date]*.

Sincerely,

*[operator's signature]*

**FIGURE 120-2**  
**LETTER APPROVING CONGESTED AREA PLAN**

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FAA Letterhead

[*date*]

[*operator's name and address*]

Dear [*operator*]:

The congested area plan for agricultural aircraft operations, which you submitted on [*date*], is approved with the following provisions:

*[Examples of special provisions]*

*Plan is valid only for a specific date or dates and place.*

*Indicate the boundaries of the congested area involved.*

*Plan is valid until signed agreement with appropriate officials of the political subdivision expires.*

*Indicate the specific category and class of aircraft to be used.*

*Plan is limited to specific weather conditions, i.e., wind direction.*

*Specify an expiration date for this approval.*

Sincerely,

[*principal operations inspector's signature*]

**FIGURE 120-3**  
**LETTER DISAPPROVING CONGESTED AREA PLAN**

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FAA Letterhead

[*date*]

[*operator's name and address*]:

Dear [*operator*]:

This is to inform you that the congested area plan, which you submitted on [*date*], for agricultural aircraft operations over [*indicate congested area, city, or town*] is not approved.

The following items were unsatisfactory:

[*List the items and how they must be corrected.*]

If you have any questions concerning this matter or intend to take action to correct these items, please contact this office at [*telephone number*].

Sincerely,

[*principal operations inspector's signature*]

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